XVII.—*Notices of British Fungi.* By the Rev. M. J. Berkeley, M.A., F.L.S., and C. E. Broome, Esq., F.L.S.

Continued from vol. xv. p. 41.]

[Plates IX., X., & XI.]

**Agaricus* (Amanita) *muscarius*, L.; Fr. Ep. p. 20.

Var. Entirely destitute of warts. Leicester, Mr. Mott.

**A.* (Lepiota) *cepæstipes*, Sow., var. B.

Fine specimens of the white form, exactly according with Bulliard's *A. cretaceus* (t. 374), were gathered at Batheaston by Mr. Broome. It is quite certain that Bulliard's plant is a *Lepiota*.

1501. *A.* (Armillaria) *bulbiger*, A. & S.; Fr. Ep. p. 40†.

In pine-woods. Hereford, Oct. 1875. The marginato-bulbose stem reminds one of some *Cortinarii*.

1502. *A.* (Armillaria) *robustus*, A. & S.; Fr. Ep. p. 41.

Rannoch, Perthshire, Dr. Buchanan White.

Agreeing closely with Krombholz's figure. Flesh very firm; taste and smell exactly that of *Polyporus squamosus*.

1503. *A.* (Tricholoma) *loricatus*, Fr. Ep. p. 60.

In woods. Viscid. Glamis, Rev. J. Stevenson. Remarkable for the thick coat of the pileus.

**A.* (Tricholoma) *crassifolius*, B.; Fr. Ep. p. 61.

This fine species has been gathered again by Mr. Cecil H. Spencer Perceval.

1504. *A.* (Tricholoma) *virgatus*, Fr. Ep. p. 62; Icon. tab. 34. fig. 1.

Forres, Rev. J. Keith.

1505. *A.* (Tricholoma) *leucocephalus*, Fr. Ep. p. 71; Ic. tab. 43. fig. 2.

C. E. Broome, Oct. 1869. Bowood, Wilts.

1506. *A.* (Tricholoma) *militaris*, Lasch.; Fr. Ep. p. 71.

Glamis, Rev. J. Stevenson.

1507. *A.* (Tricholoma) *civilis*, Fr. Ep. p. 71.

Epping, J. English. Exhibited at South Kensington, Oct. 6, 1875.

1508. *A.* (Clitocybe) *gilvus*, P.; Fr. Ep. p. 95.

West Farleigh, Kent, 1874.

**A.* (Clitocybe) *subinvolutus*, Batsch; Fr. Ep. p. 96.

Laxton Park, Northts, Oct. 22, 1875. Occurring in profusion in a ring under Scotch firs, twenty yards in diameter.

† The references, as far as Hymenomycetes are concerned, are to the new edition of the 'Epicrisis.'

It has regularly appeared in the same spot for forty years. Exactly the plant of Batsch.

1509. *A.* (Clitocybe) *subalutaceus*, Batsch ; Fr. Ep. p. 84.

Oxton Exeter, growing under *Ilex*, C. H. Spencer Perceval, Esq., Nov. 1875. Smell like that of *A. putridus* and *A. rancidus*, peculiar.

1510. *A.* (Clitocybe) *splendens*, Fr. Ep. p. 96; Ic. tab. 44. fig. 1.

Reading, Mr. Austin. Exhibited at the Fungus show, South Kensington, 1874.

1511. *A.* (Clitocybe) *expallens*, Fr. Ep. p. 100.

Glamis, Rev. J. Stevenson.

1512. *A.* (Clitocybe) *concavus*, Scop.; Fr. Ep. p. 102 ; Ic. tab. 57. fig. 2.

C. E. Broome.

1513. *A.* (Collybia) *rancidus*, Fr. Ep. p. 125.

Under cedars. Burnham Beeches, Nov. 1875, Rev. G. B. Sawyer and C. E. Broome.

The smell is very peculiar; the gills very dark, so as to be easily mistaken for those of a *Hebeloma*. Though the specimens do not answer in every respect, still, on comparing them with a drawing by Fries, who remarks that there are many varieties, they are referred without hesitation as above.

1514. *A.* (Collybia) *ventricosus*, Bull. tab. 411. fig. 1 ; Fr. Ep. p. 120.

Oct. 25, 1874, C. E. Broome. Bathford.

1515. *A.* (Omphalia) *maurus*, Fr. Ep. p. 156.

On lawns. Coed Coch.

1516. *A.* (Mycena) *aurantio-marginatus*, Fr. Ep. p. 131 ; Fl. Dan. tab. 1292. fig. 2.

Near Perth, Dr. Buchanan White, Nov. 1, 1875.

This is a most interesting addition to our list of Fungi. It is admirably figured in the 'Flora Danica,' and has a peculiar aspect which separates it from other species, looking more like a *Marasmius* than a *Mycena*.

Stem very brittle, fistulose. Smell strong. Margin striate.

1517. *A.* (Mycena) *excisus*, Lasch. ; Fr. Ic. tab. 81. fig. 1.

Glamis, Rev. J. Stevenson.

1518. *A.* (Mycena) *psammicola*, B. & Br. Pileo subhemisphærico hygrophano, particulis minutissimis irrorato, margine striato ; stipite brevi, solido, radicante, deorsum umbrino, sursum albo, toto albo-pulverulento ; lamellis segmentoideis breviter adnatis postice sinuatis ; odor fortis sed non nitrosus.

On a sand bank amongst moss. Addington, Kent, Sept. 28, 1875.

Pileus 3 lines across ; stem not 6 lines high, about ½ a line

thick, firm; pileus brown, becoming paler towards the margin. A small but well marked species.

1519. *A.* (Mycena) *metatus*, Fr. Ep. p. 142.

Forres, Rev. J. Keith. Wrotham, Kent, Oct. 1875.

1520. *A.* (Mycena) *collariatus*, Fr. Ep. p. 146; Ic. tab. 82. fig. 5.

Glamis, Rev. J. Stevenson. Addington, Kent, Oct. 1875.

1521. *A.* (Mycena) *debilis*, Fr. Ep. p. 145.

In a chestnut wood. Wrotham, Kent, Oct. 1, 1875.

1522. *A.* (Pleurotus) *pulmonarius*, Fr. Ep. p. 176.

This interesting species was exhibited at the Aberdeen Fungus show in 1874, the specimens exactly according with Paulet's figure, tab. 21.

1523. *A.* (Entoloma) *Thomsoni*, B. & Br. Pileo plano, griseo tomentoso, costis reticulatis ornato; stipite pallidiore fibrilloso tomentoso; lamellis latis incarnatis.

Amongst grass in a plantation. West Farleigh. Found in company with Dr. Thomson.

Pileus $1\frac{1}{4}$ to nearly 2 inches across, adorned with raised radiating ribs, which form reticulations in the centre; stem $1\frac{1}{2}$ line high, about 2 lines thick. The structure seems entirely peculiar to this species; for the ribs are not like those of *A. phlebophorus*.

1524. *A.* (Pholiota) *unicolor*, Fr. Ep. p. 227.

Hereford, Mr. J. Renny.

1525. *A.* (Inocybe) *maritimus*, Fr. Ep. p. 229.

Glamis, Rev. J. Stevenson. Menmuir, Rev. M. Anderson.

1526. *A.* (Inocybe) *descissus*, Fr. Ep. p. 233.

C. E. Broome.

1527. *A.* (Inocybe) *Whitei*, B. & Br. Pileo convexo, primum hemisphærico, fulvo, margine albo viscidulo, cortina candida fibrillosa, demum expanso toto fulvo; stipite e candido fulvescente, glabrescente, solido; lamellis e candidis adnexis.

Rannoch, Oct. 1, 1875, Dr. Buchanan White.

A very curious and beautiful little species, allied to *A. vatricosus*. Stature that of *A. geophyllus*.

1528. *A.*(Flammula) *lupinus*, Fr. Ep. p. 246.

Glamis, Rev. J. Stevenson.

1529. *A.* (Flammula) *apicreus*, Fr. Ep. p. 249.

On rotten trunks. New Pitsligo, Rev. J. Fergusson.

1530. *A.* (Naucoria) *temulentus*, Fr. Ep. p. 262.

Glamis, Rev. J. Stevenson.

1531. *A.* (Hebeloma) *firmus*, P.; Fr. Ep. p. 238.

Laxton Park, Norths, Oct. 22, 1875. Near fir trees.

1532. *A.* (Naucoria) *graminicola*, Nees, Syst. f. 186; Fr. Ep. p. 265.

Glamis, Rev. J. Stevenson.

A very rare species, which certainly belongs to *Naucoria*, a point still remaining doubtful in the last edition of the 'Epicrisis,' but which we are fortunately able to confirm.

1533. *A.* (Pholiota) *terrigenus*, Fr. Ep. p. 215.

Var. *minor*.

Amongst chips of hop-poles, West Farleigh, Kent.

Resembling closely *A. punctulatus*, Kalch.; but that is described as having brown spores, whereas in the present case they are ferruginous.

**A.* (Psalliota) *campestris*, L.

Var. *villaticus*, Brond. Cr. Ag. tab. 7.

An enormous specimen, 13 inches in diameter, with a stem 3 inches thick, was sent by Messrs. Lee of Hammersmith, who received it from Dr. Bennett. The pileus was covered with rich pilose scales, and had a very grand appearance. It comes up in Dr. Bennett's garden every year.

1534. *A.* (Psalliota) *hæmorrhoidarius*, Schulz. Kalchb. p. 29, tab. 18. fig. 1.

In the Duke of Cleveland's woods, Lilleshall, Salop, Nov. 1875, Rev. W. Houghton. King's Cliffe, Norths.

Like *A. Badhami*, the whole plant turns red when bruised or cut. Dr. Badham considered this one of the most excellent Fungi; but it is not included or mentioned in his book. Pileus 4 inches across; stem 4 inches high, 1 thick.

1535. *A.* (Galera) *vittæformis*, Fr. Ep. p. 269; Schæff. tab. 63. figs. 4–6.

Perth, Dr. Buchanan White, Nov. 4, 1875.

1536. *A.* (Stropharia) *caput-medusæ*, Fr. Ep. p. 288.

Glamis, Rev. J. Stevenson. A very rare and interesting species, which has occurred again this year, and was exhibited at the Fungus show at Perth.

1537. *A.* (Hypholoma) *cascus*, Fr. Ep. p. 294.

Rannoch, Perthshire, Dr. Buchanan White.

1538. *A.* (Psilocybe) *chondrodermus*, B. & Br. Pileo campanulato carnoso, margine appendiculato excepto glaberrimo lævi spadiceo, hic illic rimoso; stipite subæquali fistuloso pallidiore, fibrilloso, basi squamuloso; lamellis ventricosis affixis secedentibus, margine albo.

In pine woods. Glamis, Rev. J. Stevenson.

Pileus 1 inch across, dark bright brown, cracked here and there in different directions; veil woven and jagged; stem $2\frac{1}{2}$ lines thick above, 3 at the base. Spores ·00025 inch long, half as much wide, purple-black, almost oblong. Pileus stains the paper yellow. The species, which is quite distinct, will take its place in the first section of *Psilocybe*.

1539. *A.* (Psilocybe) *nucisedus*, Fr. Ep. p. 300.

Amongst small chips in a wood. West Farleigh, Kent.

This interesting species may be easily mistaken, if the spores are not carefully observed. We have a characteristic drawing from Fries. White when dry.

1540. *A.* (Psathyrella) *caliginosus*, Jungh. in Linn. v. 5, tab. 6. fig. 13.

Glamis, Rev. J. Stevenson.

1541. *Cortinarius* (Phlegmacium) *claricolor*, Fr. Ep. p. 336.

Glamis, Rev. J. Stevenson.

1541*bis*. *C.* (Phlegmacium) *decoloratus*, Fr. Ep. p. 351.

Epping, Mr. J. English.

1542. *C.* (Phlegmacium) *sebaceus*, Fr. Ep. p. 337.

Glamis, Rev. J. Stevenson.

1543. *C.* (Phlegmacium) *croceo-cæruleus*, Fr. Ep. p. 352; Ag. Pers. Ic. et Desc. tab. 1. fig. 2.

Laxton Park, Norths, Oct. 22, 1875.

1544. *C.* (Inoloma) *cyanites*, Fr. Ep. p. 361.

Brought from Reading by Mr. Austin to the Fungus show at South Kensington, 1874.

The specimens belong to the variety which turns red slower when bruised. We have a drawing of this magnificent species from Fries. It is one of the finest of the genus.

1545. *C.* (Inoloma) *redimitus*, Fr. Ep. p. 363.

Glamis, Rev. J. Stevenson.

1546. *C.* (Dermocybe) *camurus*, Fr. Ep. p. 367.

J. Renny. We have no information as to the locality of this or of 1549 and 1551, which we have received from Mr. Renny.

1547. *C.* (Dermocybe) *myrtillinus*, Fr. Ep. p. 368.

Glamis, Rev. J. Stevenson. Rannoch, Dr. Buchanan White.

1548. *C.* (Dermocybe) *venetus*, Fr. Ep. p. 374.

Rannoch, Perthshire, Dr. Buchanan White. A small but interesting species, differing in colour from any species with which we are acquainted.

1549. *C.* (Telamonia) *licinipes*, Fr. Ep. p. 376.

J. Renny.

1550. *C.* (Telamonia) *plumiger*, Fr. Ep. p. 377.

Glamis, Rev. J. Stevenson. A single small specimen, densely plumose.

1551. *C.* (Telamonia) *punctatus*, Fr. Ep. p. 382.

J. Renny.

1552. *C.* (Hydrocybe) *detonsus*, Fr. Ep. p. 397.

Glamis, Rev. J. Stevenson. Amongst moss in woods. Probably a very common species.

1553. *C.* (Hydrocybe) *milvinus*, Fr. Ep. p. 399.

In woods. Wrotham, Kent, Oct. 1, 1875.

1554. *Paxillus Lepista*, Fr. Ep. p. 402.

Slough, M. Terry, Esq. This is one of the most interesting additions to our list of Fungi. The rigid, almost horny cuticle, large size, and thick stem render it one of the most remarkable of the *Agaricini*.

1555. *P. paradoxus* (Kalchb.). *Agaricus paradoxus*, Kalchb. tab. 16. fig. 1; Fr. Ep. p. 244.

Near Shrewsbury, W. Phillips, Esq. Wrotham, Kent, Sept. 30, 1875. Amongst decayed furze.

This very curious plant, which is admirably figured in the work above quoted, is undoubtedly a *Paxillus*. The spores are more like those of a *Boletus* than an Agaric; they are oblong, ·00035–·00036 inch long, and about a fourth as much wide. It is at once distinguished from *P. leptopus* by the gills being distant, and not "admodum confertæ."

1556. *Lactarius squalidus*, Krombh. tab. 4. figs. 23–25.

Scotland, 1875.

1557. *L. minimus*, Smith, in Journ. of Bot. 1873, p. 205.

Forres, Rev. J. Keith.

1558. *Hygrophorus discoideus*, Fr. Ep. p. 408. *Agaricus semigilvus*, Secret. no. 771.

Laxton Park, Norths, Oct. 22, 1875. Exactly answering to the description of Secretan, but not so stout as in a figure received from Fries. Solitary or tufted, stem dotted all over with viscid granules.

1559. *H. lacmus*, Fr. Ep. p. 416.

Epping, Mr. James English. Exhibited at South Kensington, 1875.

**H. Colemannianus*, Blox.; Fr. Ep. p. 417.

A form of this species apparently occurred at Laxton, which at first seemed an exaggerated state of *H. ceraceus*. The pileus and stem were extremely viscid, and of a full but rather dull yellow; the stem hollow and extremely brittle. As it became dry the colour changed to various tints of tawny; the gills very decurrent, thin, and variously shaded. The margin was subplicato-striate as in *H. vitellinus*, not subdecurrent as in *H. lætus*, besides which the stem was any thing rather than tough. As two specimens only were found, it is thought better to refer them to *H. Colemannianus* than to propose a new species.

1560. *H. sciophanus*, Fr. Ep. p. 417.

Perth, Dr. Buchanan White.

Spores very pale clay-coloured. There were two forms—one with a darker pileus and the flesh dark, the other paler, with the flesh also pale. The former only deposited spores; it is probable therefore that the pale form was not so fully

developed. Species of *Coprinus* occasionally occur without a trace of spores.

1561. *H. cinereus*, Fr. Ep. p. 413; Ätl. Svamp. tab. 30.

Coed Coch, Mrs. Lloyd Wynne. Great Elm, Somerset, C. E. Broome. Rannoch, Dr. Buchanan White. Exactly according with the upper figures in the plate cited above, and surely distinct from *H. pratensis*.

1562. *Russula olivacea*, Fr. Ep. p. 445.

Slough, M. Terry, Esq.

1563. *R. galochroa*, Fr. Ep. p. 447; Bull. tab. 509 L, M.

Slough, M. Terry, Esq.

1564. *R. pectinata*, Fr. Ep. p. 449; Bull. tab. 409 N, O, P.

Glamis, Rev. J. Stevenson. Smell like that of *R. fœtens*. Pellicle separable. Exactly resembling the two latter figures of Bulliard, which he refers rather doubtfully to *R. heterophylla*.

1565. *Cantharellus Haughtoni*, Phillips, MS. Pileo tenui, convexo, umbilicato, glabro; stipite gracili, apice incrassato, primum subtiliter fibrilloso; lamellis subdecurrentibus angustis pallide carneis.

Hereford, W. Phillips and others.

Pileus 1 inch or more across, thin, dirty white, with a tinge of flesh-colour. Stem 2 inches high, 1 line thick, slightly thickened above, minutely fibrillose, stuffed, rooting at the base, which is more or less cottony. Gills scarcely forked, narrow, slightly decurrent. Sometimes 2 inches across. Allied to *C. albidus*, and possibly included by Fries, but very different from the 'Flora-Danica' plant recorded before under no. 1421.

1566. *Marasmius epichloe*, Fr. Ep. p. 479. *M. gramineus*, Lév.

On the base of grasses. Hereford, J. Renny. Undoubtedly Léveillé's plant, but possibly a mere form of *M. stipitarius*.

1567. *Lentinus pulverulentus*, Fr. Ep. p. 482. *Agaricus pulverulentus*, Scop. Carn. p. 434.

Glamis, Rev. J. Stevenson.

Tufted, at first infundibuliform, then lateral flabelliform, fuliginous, floccoso-pulverulent, with little umber particles; stem elongated, at length smooth; gills thick, pallid, deeply decurrent, their edge crenulate but not torn. Pileus 2 inches across, stem 3 inches high. This seems to be truly the plant of Scopoli.

1568. *Polyporus floccopus*, Rostk. tab. 13.

Glamis, Rev. J. Stevenson.

Fries remarks that it is a question whether this species is not a form of *Polyporus brumalis*; but it appears to us quite distinct.

1569. *P.* (Resupinati) *subgelatinosus*, B. & Br. Orbicularis, margine elevato, subgelatinoso, albo-tomentoso, nigricante; poris griseis, parvis, acie acutis.

On dead wood. Rannoch, Dr. Buchanan White. Apparently parasitic on a decurrent form of *P. amorphus*.

This singular species forms little pulvinate masses, with an obtuse raised border, which is at first tomentose and pallid, of a subgelatinous consistence, and turning black. The pores are of a pale delicate grey, with an acute even edge, about $\frac{1}{40}$ of an inch in diameter. We cannot point out any species to which it is allied.

1570. *Trametes inodora*, Fr. Ep. p. 584.

On the flat top of an old mossy beech-stump. Stoke Poges, M. Terry, Esq.

Pores colourless, slightly angular, about $\frac{1}{110}$ inch wide, nearly $\frac{1}{4}$ inch long, not the least linear. Inodorous; externally tomentose, white, with a very slight tinge of pink at the base. As in *Dædalea latissima*, the texture radiates from a central point, and is of a pure white.

1571. *T. Terrei*, B. & Br. Resupinata, lata, suborbicularis, pulvinata, contextu suberoso albo; poris angulatis, hic illic sinuatis, pallidis.

On beech. Stoke Poges, M. Terry, Esq.

About 3 inches across, 1 inch thick in the centre; substance white, delicately fibrous, radiating from a central point, zoneless; pores about $\frac{1}{40}$ inch across, pallid, angular in the centre, sinuated towards the edge. Habit that of *Dædalea latissima*. Inodorous.

1572. *Hydnum lævigatum*, Swartz; Fr. Ep. p. 599; Sverig ätl. Svamp. tab. 81.

In pine-woods. Rannoch, Dr. Buchanan White. A far more solid species than *H. fragile*.

1573. *Irpex pendulus*, Fr. Ep. p. 620.

Menmuir, Rev. M. Anderson. Agreeing with the figure of Albertini and Schweinitz. The species varies greatly; specimens obtained previously were not in a normal condition.

Amongst the Fungi still preserved in Sowerby's herbarium is one marked *Hydnum erectum*, parasitic on some *Polyporus*. This appears identical with Fries's *Sphæronema hydnoideum*, which he no longer refers to *Radulum aterrimum*.

**Craterellus lutescens*, Fr. Ep. p. 630.

Rannoch, Perthshire, Dr. Buchanan White. The hymenium of a beautiful orange. Sent at the same time with very characteristic specimens of *Cantharellus lutescens*.

1574. *Thelephora pallida*, Fr. Ep. p. 633.

We have received from the Rev. W. Houghton and Mr.

Phillips a *Thelephora* with a hispid hymenium, which they refer to this species. It is, however, so like *T. Sowerbeii* that we hesitate about its diagnosis, but think it better to record their observation.

1575. *T. clavularis*, Fr. Ep. p. 634.

On the ground. Wallington, Northumberland, C. H. Spencer Perceval. We have lately received from Dr. White specimens which would be referred to this species were it not for the strong fœtid scent of *T. palmata.*

1576. *T. intybacea*, Pers. Syn. p. 567.

Amongst *Tetraphis pellucida.* Burnham, Rev. G. H. Sawyer. Glamis, Rev. J. Stevenson. Exactly answering to Bulliard's figures, tab. 483. figs. 6 & 7, tab. 278, and quite distinct from *T. laciniata.*

1577. *T. crustacea*, Schum.; Fr. Ep. p. 637.

On the ground. Burnham, Rev. G. H. Sawyer. Both in this and last year.

1578. *Stereum vorticosum*, Fr. Ep. p. 639.

On beech. Menmuir, Rev. M. Anderson.

1579. *S. pini*, Fr. Ep. p. 643.

On bark of Scotch fir. Glamis, Rev. J. Stevenson.

1580. *S. rufum*, Fr. Ep. p. 644.

Glamis, Rev. J. Stevenson. Rev. J. Keith.

1581. *Corticium salicinum*, Fr. Ep. p. 647.

Forres, Rev. J. Keith.

This is certainly the same with *Exidia cinnabarina*, B. & C., which has the curved spores of *Exidia.* We have not sufficient specimens of the European form to justify us in separating it from *Corticium*, to which genus it can scarcely belong.

1582. *C. amorphum*, Fr. Ep. p. 648.

On larch. Perth, Dr. Buchanan White.

This curious plant is so like large specimens of *Peziza calycina* that it is not surprising that the two should have been confounded, and in consequence the plant figured by Willkomm under the name is really *P. calycina.* We were at first inclined to think that it might be a conidiiferous form of the *Peziza* in question, analogous to *Cyphella Currei*; but the structure is such as to make us consider it autonomous, and probably the type of a new genus; for it does not agree well with the characters of *Corticium.* The substance is white and fleshy, consisting of rather coarse threads which at the base form a close sclerotioid network. The hymenium consists of colourless threads and orange-coloured clavate bodies filled with pigment. These at length project beyond the surface, and produce four globose rough spores, ·001 inch in diameter, which contain an

angular body within, which looks like a cystolith. After a time each spore becomes elliptic, and now measures ·0012 inch in length, produces about eight elliptic echinulate sporidia in its cavity, which are from ·0004–·0005 inch long—a circumstance without parallel as far as we know in Hymenomycetes. All these points have been observed by each of us independently.

Plate IX. fig. 1. *a.* first stage of pseudasci; *b.* second; *c.* filled with endochrome; *d.* sporophore with young spores; *e.* the same, with mature spores; *f.* separate spore; *g.* the same, producing sporidia; *h.* sporidia. All more or less magnified.

1583. *C. serum*, Fr. Ep. p. 659. *Thelephora sera*, Pers. Syn. p. 580.

Epping, Mr. James English. Numerous specimens have been received from the Rev. J. Stevenson, Rev. M. Anderson, and others from Scotland.

A very curious species, some specimens approaching, if not identical with, *Hydnum papyraceum*. The aculei are mostly very distant, either entire or plumose at the tips, with the interstices just like the hymenium of a true *Corticium*. Sometimes they are radiato-floccose; but there are intermediate states.

1584. *C. cinnamomeum*, Fr. Ep. p. 650.

On wood. Glamis, Rev. J. Stevenson.

1585. *C. ferrugineum*, P.; Fr. Ep. p. 661.

On various decayed vegetable substances. Wothorpe. Received also from Scotland.

1586. *Clavaria Krombholzii*, Fr. Ep. p. 669. *C. Kunzei*, Krombh. tab. 53. figs. 15, 16.

On the ground in woods. Glamis, Rev. J. Stevenson.

1587. *C. condensata*, Fr. Ep. p. 672.

On the ground under trees. West Farleigh, 1874.

1588. *Pterula subulata*, Fr. Ep. p. 682.

Burnham Beeches, Rev. G. H. Sawyer, 1874.

1589. *Typhula translucens*, B. & Br. Candida pellucida; stipite brevi sursum incrassato; capitulo irregulari subobovato.

On the ground. Glamis, Rev. J. Stevenson.

Minute, pure white, resembling somewhat a prematurely dried Myxogast, but a true Hymenomycete.

1590. *Hymenula constellata*, B. & Br. Orbicularis, dein dense congesta, pallida; sporis minutis fusiformibus.

On a decaying board. C. E. Broome.

Formerly referred to *Fusarium minutulum*, Cd. Individual plants about ·007 inch across, densely crowded in the centre, scattered towards the margin of the patches, composed of compact branched threads bearing minute spores, ·0002 inch long, in a dense stratum.

We perfectly agree with Fries, in the new edition of the

'Epicrisis' (p. 700), that the greater part of the described species of *Hymenula* do not really belong to Hymenomycetes. Some are doubtless conidiiferous forms of ascophorous Fungi.

**Geaster mammosus*, Fr. Syst. iii. p. 17.

This curious species, of which no other British specimen was known than that figured by Sowerby, has lately been found in Berkshire by the Rev. G. H. Sawyer.

**G. Michelianus*, B. & Br.

Anglesea, Hon. W. O. Stanley.

1591. *Lycogala flavo-fuscum*, Ehrb.

Coed Coch. Named on the authority of Dr. Rostafinski.

1592. *Reticularia olivacea*, Fr. Syst. iii. p. 89.

On decayed fir. Aboyne, 1870. Named on the authority of Dr. Rostafinski, who considers *R. versicolor* synonymous. A small specimen has been gathered by Dr. Buchanan White near Perth.

1593. *Chondrioderma Œrstedii*, Rtf. Mon.

On bark more or less covered with moss. Jedburgh, R. Jerdon.

1594. *C. niveum*, Rtf. Mon.

On dead wood. Linlithgow, J. C. Bauchop.

1595. *Badhamia capsulifer* (Bull. sub *Sphærocarpo*), Bull. tab. 470. fig. 2.

Glamis, Aug. 1874, Rev. J. Stevenson.

The spores are rough, whereas in *B. utriculosa* they are smooth. Fries, as far as we can find, does not quote Bulliard's figure. The peridia reflect the most beautiful tints of steel-blue and lilac; they are densely crowded, as in Bulliard's figure.

1596. *Physarum theioteum*, Fr. Syst. iii. p. 142. *P. virescens*, Dittm.; Sturm, D. F. tab. 61.

On little twigs. Glamis, Rev. J. Stevenson.

1597. *P. tussilaginis*, B. & Br. *Badhamia capsulifera*, Cooke, Exs. Peridiis depressis, adnatis, tenuissimis nitidis; capillitio ramoso tenui albo; sporis globosis, asperis.

On leaves of *Tussilago*, first discovered by Mr. Brittain. It is quite certain that this is not *Sphærocarpus capsulifer*, Bull.

1598. *P. nigrum*, Fr.

On decayed wood. Glamis, Rev. J. Stevenson.

Threads slender; spores nearly black, ·0007 inch in diameter.

**P. atrum*, Fr. Syst. iii. p. 147.

On very decayed *Populus alba*. Elmhurst, Dec. 1859.

1599. *Craterium leucostictum*, Fr. Syst. iii. p. 152.

On dead leaves. Glamis, Rev. J. Stevenson.

1600. *Cribraria macrocarpa*, Schrad. tab. 2. fig. 3.

Glamis, Rev. J. Stevenson.

1601. *C. fulva*, var. b. *intermedia*, Schrad. tab. i. fig. 2.

On decayed wood. Glamis, Rev. J. Stevenson.

Spores ·00035–·0005 inch in diameter.

1602. *Arcyria Friesii*, B. & Br. Gregaria; peridiis stipitatis, globoso-ovatis, cinereis; capillitio ovato-cylindrico sporisque glaucis.

On sawdust. Glamis, Rev. J. Stevenson.

The plant which generally passes for *Arcyria cinerea*, and which is figured in the 'Flora Danica,' and is common in exotic as well as British collections, has not glaucous spores. The specimens received above appear to be what Fries intended; and therefore the above name is assigned to them. The capillitium is coarser than that of *A. cinerea*, and the spores are decidedly blue. Its habit also is different, the peridia being scattered in *A. cinerea*.

1603. *A. ferruginea*, Rtf. Mon.

On dead wood. Sow. Herbarium.

Included often in *A. punicea*, from which it differs not only in colour, but in the comparative size of the spores.

1604. *A.* (Lachnobolus) *congesta*, B. & Br. Peridiis in massas orbiculares congestis sessilibus, nitidis, flavo-umbrinis; floccis exasperatis sporisque concoloribus.

On dry wood. Halse House, Somerset, October 1861, C. E. Broome.

Forming orbicular masses ½ inch in diameter, consisting of crowded shining umber peridia, looking at first like a *Licea* or a heap of moth's eggs. Just the colour of gingerbread. Spores globose, ·0003–·0004 inch in diameter.

Plate IX. fig. 2. *a.* plant, natural size; *b.* portion of plant, magnified; *c.* capillitium; *d.* spores.

1605. *Lindbladia effusa*, Fr. *Licea effusa*, P. & Ehrb.

With *Cribraria argillacea*. Aboyne, 1870. Forres, Rev. J. Keith. We have an original specimen from Fries marked as probably belonging to a new genus, before it was characterized.

1605 bis. *Perichæna decipiens*, B. & Br. Sporis majoribus minoribusque læte aureis.

On fir-cones. Perth, Dr. Buchanan White.

The external appearance is just the same as that of *P. strobilina*; but the spores are bright yellow and of two kinds, the larger ·0009–·002 inch long, those of *P. strobilina* ·001–·0012 inch long, which is about the size of the smaller spores of *P. decipiens*.

Plate IX. fig. 3. *a.* spore of *P. strobilina*; *b.* the smaller spores of *P. decipiens*; *c.* the larger spores; *d.* the capillitium. All more or less magnified.

1606. *Septoria Avellanæ*, B. & Br.; Rab. Exs. 1958.

On the underside of leaves of *Corylus Avellana*, growing in a circinate manner. Bathford, C. E. Broome.

Spores fusiform, curved, about ·0004 inch long.

1607. *Sporidesmium triglochinis*, B. & Br. Soris punctiformibus e basi cellulari oriundis; sporis junioribus obovatis, stipite brevi sursum incrassato, dein subglobosis oblique divisis, demum oblongis fenestratis.

On *Triglochin palustre*. Rannoch, Dr. Buchanan White, March 1875.

Sori bright brown, ·006–·008 inch in diameter, spores ·0003–·0007. Approaches *S. pallidum*, B. & C.; but that is on fir, and the spores are not composed of globose cells as in that species.

Plate X. fig. 4. *a.* plant *in situ*, magnified; *b.* group of spores; *c.* spores, more highly magnified.

1608. *Puccinia Moliniæ*, Tul. Ann. d. Sc. Nat. Sept. 1854, p. 141.

On *Molinia cærulea*. Rannoch, Dr. Buchanan White.

**P. calthæ*. On leaves of *Ranunculus ficaria* with *Æcidium calthæ*. New Pitsligo, Rev. J. Fergusson.

**Trichobasis Cirsii*, Lasch., has been found in Perthshire by Dr. Buchanan White and Dr. Cooke.

1609. *Stilbum melleum*, B. & Br. Minutum, pallide luteum; stipite curto sursum dilatato hispido; sporis globosis, minimis, corpusculis multo majoribus verruculosis in contextu conditis.

On bark. King's Wood, Congresbury, Jan. 1861, Miss Plues.

In form resembling *Ciliciopodium violaceum*, but of a uniform pale yellow tint; head composed of clavate processes, about ·009–·01 inch across, covered with sugary particles or the granules of crystallized honey. The globose rough bodies, ·0005 inch in diameter, appear to be imbedded in the substance.

Plate X. fig. 5. *a.* plant, magnified; *b.* head, showing the situation of the corpuscles; *d.* structure of head; *e.* corpuscles. All highly magnified.

1610. *Fusarium translucens*, B. & Br. Pellucidum, substipitatum, margine sub lente leviter ciliato albo-lutescente, sursum umbilicato; sporis tenuibus cylindricis.

On deal. Glamis, Rev. J. Stevenson.

Forming little transparent specks about $\frac{1}{6}$ of a line in diameter. Spores ·0003 inch long. Differs from *F. minutulum*, Cd., in the form of the spores.

1611. *F. cucumerinum*, B. & Br. Pallide aurantiacum subglobosum dein effusum; sporis breviter fusiformibus.

On diseased cucumbers. Sibbertoft.

Spores ·0003 inch long.

1612. *F. rhabdophorum*, B. & Br. Erumpens, subfulvum, elevatum e basi orbiculata alba; sporis rectis rhabdiformibus.

On dead sticks. Forres, Rev. J. Keith.

Spores ·0006 inch long.

1613. *Cylindrosporium senecionis*, B. & Br. Cæspitulis e floccis flexuosis gracilibus; sporis cylindricis e maculis candidis oriundis.

On leaves of *Senecio vulgaris*. Rannoch, Dr. Buchanan White. Forming white conspicuous irregular patches on the leaves.

Spores variable in length, ·0003–·0006 inch or more long.

1614. *Penicillium coffeicolor*, B. & Br. Late effusum umbrinum, floccis brevibus crassiusculis; sporis majoribus globosis.

On Pasteur's solution, South Kensington, Profs. Huxley and Dyer.

Resembling closely in colour *Miainomyces fungicolus*, Cda., but the spores are very different. The threads are short and coarse; the spores varying much in form, the most perfect smooth, with a large nucleus, and about ·0005 inch in diameter.

1615. *Exobasidium vaccinii*, Wor.; Woronin, Abh. d. naturf. Ges. zu Freiburg, iv., Fung. Aust. de Thümen, no. 322.

On leaves of *Vaccinium vitis-idæa* and other species. On *Rhododendron* it forms a thick gall-like swelling.

1616. *Schinzia alni*, Woron. Ann. d. Sc. Nat. sér. 5, x. p. 80, tab. 6. figs. 1–7.

Forming tubercles on the roots of alder. Powerscourt, 1867.

1617. *Leotia circinans*, P.; Fr. Syst. ii. p. 27.

On the ground, abundantly. Glamis, Rev. J. Stevenson.

1618. *Vibrissea microscopica*, B. & Br. Minutissima; stipite brevi nigro; capitulo griseo.

On damp fir wood. Rannoch, Dr. Buchanan White.

Scarcely visible without a lens. Stem very short, black; head grey, leaving a cup-shaped depression when completely washed off. Sporidia ejected, filiform.

1619. *Peziza* (Geopyxis) *arenaria*, Osb.; Fr. Syst. ii. p. 65.

On sands near St. Andrews, Rev. M. Anderson.

This very curious species, which is so brittle that it is difficult to preserve good specimens, forms a cylindrical or forked process penetrating the sand and collecting its particles. The roots of the *Psamma* are often attached, and perhaps in some cases have been mistaken for mycelium.

1620. *P.* (Humaria) *constellatio*, B. & Br. Minuta, gregaria nec stipitata, coccinea, convexa, sicca tantum cupulæformis;

paraphysibus linearibus apice curvatis hic illic ramosis; sporidiis globosis demum reticulatis. Fl. Dan. tab. 656. fig. 2.

Occurring in little groups, but not crowded, by the side of the road. Addington, Kent. It has also been found near Hereford by Dr. Cooke.

Sporidia ·0007 inch in diameter. Dr. Cooke has the same thing from Hereford; and similar sporidia, but slightly larger, occur in *P. humosa*, Rehm and Fuckel. *P. humosa*, Fr., however, has cups 2–4 lines in diameter, which does not at all accord with our plant. The figure in 'Flora Danica' gives exactly the habit; and the magnified plant confirms our diagnosis.

1621. *P.* (Taphesia) *rhabdosperma*, B. & Br. Subiculo tenui tomentoso, pallide fulvo; cupulis sparsis concoloribus extus saturatioribus villosis, margine inflexo, hymenio lætiore; ascis lanceolatis, obtusis; sporidiis filiformibus.

On dead wood. Leigh Down, Nov. 5, 1860.

Sporidia ·003–·0035 inch long. Allied to *P. cæsia.*

Plate X. fig. 6. *a.* plant, magnified; *b.* asci and sporidia, more highly magnified.

1622. *P.* (Dasyscyphæ) *fuscescens*, P.; Fr. Syst. ii. p. 95.

On beech-leaves, principally on the main nerve. Builth, South Wales, W. Phillips.

1623. *P.* (Mollisia) *tripolii*, B. & Br. Erumpens, aurantiaca, margine nigrello cincta; sporidiis oblique ellipticis binucleatis.

On dead stems of *Aster tripolium.* King's Lynn, Sept. 10, 1875, C. B. Plowright.

Minute, erumpent, surrounded by the blackened cuticle, which often splits into tooth-like laciniæ. Hymenium orange. Paraphyses flexuous, sometimes forked. Sporidia obliquely elliptic, ·0005 inch long, half as much wide. A curious species, reminding one somewhat of *P. fusarioides.*

1624. *Helotium laburni*, B. & Br. Breviter stipitatum, cupulis extus villosis furfuraceis pallidis, margine inflexo; disco ochraceo læticolori; sporidiis fusiformibus quadrinucleatis.

On decorticated branches of *Cytisus laburnum*, or beneath the cuticle, which it seems to throw off. Menmuir, Rev. M. Anderson.

Sporidia ·0009 inch long.

Mr. Phillips, who has paid great attention to the genus, writes that the only species approaching it in the fruit is *Helotium salicellum*, Fr. Karsten has a species, *Pezicula sublici-formis*, which has sporidia nearly the same size and shape, with two nuclei, but is otherwise different.

**Stictis lecanora*, Schm. & Kz.; Fr. Syst. ii. p. 193.

Var. *pyri*. Disco aterrimo.

On the bark of pear-trees. Shrewsbury, W. Phillips, Esq.

We were at first inclined to think this a distinct species, as we found the sporidia much smaller, ·0004–·0005 inch long, whereas in *S. lecanora* we found them ·0009 inch; but later observations proved that they are sometimes quite as large, and we therefore consider it a mere variety.

Plate XI. fig. 7. *a.* asci and sporidia of *Stictis lecanora*; *b.* ditto of var. *pyri*.

1625. *Nectria Keithii*, B. & Br. Peritheciis minutis, pallidis, congestis, furfuraceis, ostiolo distincto; sporidiis fusiformibus inarticulatis; conidiophoris punctiformibus confluentibus carneo-griseis.

On cabbage-stalks. Forres, Rev. J. Keith.

Sporidia ·0002–·00025 inch long, conidia ·0002 inch.

1626. *Sphœria* (Byssisedæ) *Keitii*, B. & Br. Peritheciis cæspitosis e floccis atris ramosis oriundis, apice calvis roseis, radiatis; ostiolo impresso punctiformi; sporidiis fusiformibus triseptatis ad commissuras contractis.

On a piece of cord. Glasnevin Botanic Garden, W. Keit.

Perithecia rather large, the apex rose-coloured, with a punctiform impressed ostiolum, and radiated, apparently from the shrinking of the outer coat as they increase in size. Sporidia fusiform, triseptate, constricted at the division, each of which contains a large nucleus, ·0012 inch long, ·00025 wide.

It is possible that this very curious species may be of exotic origin, as it occurred in a hothouse. The only species to which it seems to bear any evident relation is *S. rhodosticta*, B. & Br., Fungi of Ceylon, no. 1096.

Plate XI. fig. 8. *a.* group of perithecia; *b.* apex of ditto; *c.* early stage; *d.* ascus; *e.* sporidia.

1627. *S. empetri*, Fr. Syst. ii. p. 522.

On leaves of *Empetrum nigrum*. Sow of Athol, May 1874, Dr. Buchanan White.

Asci ·002 inch long; sporidia pale brown, linear, uniseptate, ·0007 inch long.

1628. *Ascomyces alni*, B. & Br. Inflorescentiam deformans; sporidiis in ascis numerosis minoribus.

On female catkins of alder forwarded by Dr. Masters.

Differs from other species in the asci containing more numerous sporidia, which are only ·0002–·0003 inch long, whereas in *A. bullatus* they are ·0004 inch.

1629. *A. pruni* (Fuckel), sub *Exoascus*, Fungi Nassoviæ, 1861, p. 29.

On bag-plums. Extremely abundant on the common sloe at Sibbertoft.

**Labrella ptarmicæ*, Desm.; Fr. El. ii. p. 149.

On leaves of *Achillea ptarmicæ*. Rannoch, Dr. Buchanan White.

These are the first truly British specimens we have seen. It appeared for some successive seasons at King's Cliffe on plants brought from Lambersart already impregnated with the mycelium; but after a time the parasite vanished.

1630. *Rhytisma empetri*, B. White. Ambiens, atrum, lucidum, secundum longitudinem rugosum.

On *Empetrum nigrum*. Rannoch, Dr. Buchanan White. Completely surrounding the stem, shining jet-black, wrinkled longitudinally. The asci are straight, but immature.

XVIII.—*On the Habitat of* Uromys aruensis (*Gray*) *and its Allies*. By Dr. A. B. Meyer.

Dr. J. E. Gray, in describing (Ann. & Mag. Nat. Hist. ser. 4, 1873, vol. xii. p. 418) a new species of *Uromys* from my collections, introduced it with the following words:—

"The British Museum received two specimens of a male and female rat, which Dr. A. B. Meyer obtained at Aru Island in April 1870, and at Buntimunang, in the south-west part of Celebes, in November."

This note requires a rectification on my part. I never was on the Aru Islands; and in April 1870 I was still in England; in October of the same year I arrived in Java; and it was in November 1871 that I first spent some days collecting in Bantimurang (it should be "Bantimurang," and not "Buntimunang"). But, besides this, the female *Uromys* was not procured by me on South-west Celebes; it belonged to a small collection of animals from the Aru Islands, which I had bought before I came to Makassar, in September 1871. Some confusion must have happened in Europe with two of my labels, to have led Dr. Gray to the statement that *Uromys aruensis* occurs on the Aru Islands *and in the south-west of Celebes*. My diary and collection-notes are quite positive on this point; and there can remain no doubt that a mistake has been made. I regret that I did not see this incorrect statement earlier; but I now hasten to make known that from my Celebes collections no *Uromys* reached Europe. Celebes being so very poor in